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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/535,629	03/24/2000	Jeffrey W. Scott	37398/SAH/C715	2082
3017	7590	03/27/2004	EXAMINER	
BARLOW, JOSEPHS & HOLMES, LTD. 101 DYER STREET 5TH FLOOR PROVIDENCE, RI 02903			NGUYEN, TUAN N	
			ART UNIT	PAPER NUMBER
			2828	

DATE MAILED: 03/27/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

9/01

<b>Office Action Summary</b>	<b>Application No.</b> 09/535,629	<b>Applicant(s)</b> SCOTT, JEFFREY W.	
	<b>Examiner</b> Tuan N Nguyen	<b>Art Unit</b> 2828	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 02 January 2004.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 45-72 is/are pending in the application.  
     4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 45-72 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.



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**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
     Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
     Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
     a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Amendment***

1. In respond to applicant's amendment filed 01/02/2004, claims 1-44 have been canceled.

Claims 45-72 are pending.

2. Applicant's arguments with respect to claims 45-72 have been considered but are moot in view of new ground(s) of rejection.

### ***Drawings***

3. New corrected drawings are required in this application because it is not acceptable.

### ***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or non-obviousness.

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5. Claims 45-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Davis et al. (US 6069905).

With respect to claims 45-72, Davis et al. ('905) shows in (figures 1,3,7) and discloses an optoelectronic device assembly comprising a substrate, a VCSEL with active region and mirrors alternate with Oxide and Nitride DBR coating, an encapsulation medium, an optical transparent tuning layer, medium matching layer, and change a top facet to adjust slope of the laser emission. (Fig 3: 10,14, 34, 37) (Col 2: 45-67; Col 3). It has been held that omission of an element and its function in a combination where the remaining elements perform the same, or where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Karlson, 136 USPQ 184 & In re Aller, 105 USPQ 233. Since claims 67-72 recites the same or identical elements/limitations it is inherent to use patent '905 to recite the method of fabricating an encapsulated optoelectronic device, product by process.

6. Claims 45-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Scott et al. (US 6567435) in view of Swirhun et al. (US 5577064).

With respect to claims 45-72, Scott et al. ('435) shows in (figures 1,4,6-24) and discloses an optoelectronic device assembly comprising a substrate, a VCSEL, an encapsulation medium, an optical transparent tuning layer, medium matching layer, and change a top facet to adjust slope of the laser emission. (Fig 9: 100-118) (Col 6-10). The claim further require the first and second set of DBR with Oxide and Nitride. Swirhun '064 discloses the VSCEL with a VCSEL with active region and mirrors alternate with Oxide and Nitride DBR coating (Col 10: 30-40).

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For the benefit of having a VSCEL with DBR mirror alternating with Oxide and Nitride layers to output a different light wavelength or signal, it would have been obvious to one of ordinary skill in the art to provide Scott et al. (US 6567435) with what is taught or suggested by Swirhun et al. (US 5577064). It has been held that omission of an element and its function in a combination where the remaining elements perform the same, or where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Karlson, 136 USPQ 184 & In re Aller, 105 USPQ 233. Since claims 67-72 recites the same or identical elements/limitations it is inherent to use patent '905 to recite the method of fabricating an encapsulated optoelectronic device, product by process.

#### ***Citation of Pertinent References***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. It is cited primarily to show the product of the instant invention.

See attach IDS.

#### ***Communication Information***

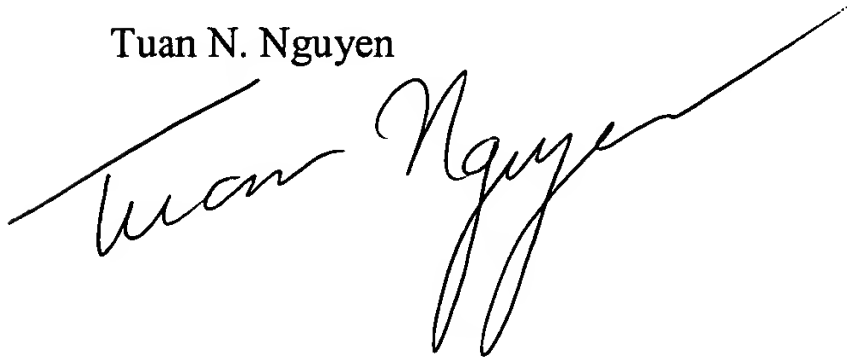
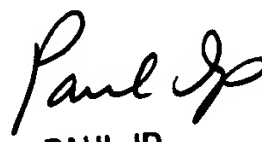
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tuan N Nguyen whose telephone number is (571) 272-1948. The examiner can normally be reached on M-F: 7:30 - 4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Paul Ip can be reached on (571) 272-1941. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9318 for regular communications and (703) 872-9319 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 306-3329.

Tuan N. Nguyen

A handwritten signature in black ink, appearing to read "Tuan Nguyen", with a long, sweeping horizontal line extending from the end of the signature.A handwritten signature in black ink, appearing to read "Paul Ip".

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